

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/Ala Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-010050**Date Inspected:** 30-Oct-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector George Goulet was present during the times noted above for observations relative to the work being performed.

Bay 10

This QA Inspector randomly observed the following work in progress in Bay 10:

SMAW repair welding of weld joint ND1-5012-33-1A located on PCMK north tower, lift 1, strut. Welder was identified as 050289. ZPMC QC was identified as CWI Li Ming (QC1). Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC Li Peng Fei, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-485-SMAW-2G(2F)-FCM-repair-1 as noted on ZPMC repair order T-CWR412. Also present at this location and appearing to be monitoring the welding operation was ABF Representative Xie Yan.

SMAW repair welding of weld joint ND1-5012-28-1A located on PCMK north tower, lift 1, strut. Welder was identified as 040582. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC Li Peng Fei, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-485-SMAW-2G(2F)-FCM-repair-1 as noted on ZPMC repair order T-CWR412. Also present at this location and appearing to be monitoring the welding operation was ABF Representative Xie Yan.

SMAW welding of weld joint SSTL4-1L/L-1B located inside PCMK south tower, lift 4, skin D to skin E at 143M

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double diaphragm. Welder was identified as 052493. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-T-3211-TC-U4b-1.

FCAW welding of weld joint SSTL4-1B/L-1B located inside PCMK south tower, lift 4, skin C to skin D between 131M and 135M double diaphragms. Welder was identified as 040343. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-T-2232-TC-U4b-1.

FCAW welding of weld joint SSTL4-1B/L-1B located inside PCMK south tower, lift 4, skin C to skin D at 119M double diaphragm. Welder was identified as 050041. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-T-2232-TC-U4b-1.

FCAW welding of weld joints NSTL4-3K/L-113, 105, 117 located inside PCMK north tower, lift 4, skin A and skin E to the top of 143M double diaphragm. Welder was identified as 052075. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-T-4332-TC-P5-F and WPS-B-T-4333-TC-P5-F.

FCAW welding of weld joints NSTL4-3K/L-114, 106, 118 located inside PCMK north tower, lift 4, skin A and skin E to the top of 143M double diaphragm. Welder was identified as 053116. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-T-4332-TC-P5-F and WPS-B-T-4333-TC-P5-F.

FCAW welding of weld joints NSTL4-3J/L-113, 106, 117 located inside PCMK north tower, lift 4, skin A and skin E to the top of 135M double diaphragm. Welder was identified as 057266. ZPMC QC was identified as CWI Wan Wen Zhong (QC2). The welding variables recorded by QC2 appeared to comply with WPS-B-T-4332-TC-P5-F and WPS-B-T-4333-TC-P5-F.

FCAW welding of weld joints NSTL4-3K/L-114, 107, 118 located inside PCMK north tower, lift 4, skin A and skin E to the top of 135M double diaphragm. Welder was identified as 057244. ZPMC QC was identified as QC2. The welding variables recorded by QC1 appeared to comply with WPS-B-T-4332-TC-P5-F and WPS-B-T-4333-TC-P5-F.

SAW welding of weld joint SSTL4-1B/L-4A located outside PCMK south tower, lift 4, skin A to skin B, between approximately the 138M mark and the 144M mark. Welder was identified as 050295. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-T-2221-B-L2c-S-2.

SAW welding of weld joint SSTL4-1B/L-4A located outside PCMK south tower, lift 4, skin A to skin B, between approximately the 122M mark and the 128M mark. Welder was identified as 040489. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-T-2221-B-L2c-S-2.

SAW welding of weld joint SSTL4-1B/L-5A located outside PCMK south tower, lift 4, skin B to skin C, between approximately the 130M mark and the 136M mark. Welder was identified as 207745. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-T-2221-C-U2b-S-2.

SAW welding of weld joint SSTL4-1B/L-5A located outside PCMK south tower, lift 4, skin B to skin C, from the

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bottom of lift 4 to approximately the 120M mark. Welder was identified as 201750. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-T-2221-C-U2b-S-2.

Bay 11

This QA Inspector randomly observed the following work in progress in Bay 11:

FCAW welding of weld joints ESTL4-2C/L-32, 31 located inside PCMK east tower, lift 4, skin A, bottom of double diaphragm 119M to stiffener. Welder was identified as 042218. ZPMC QC was identified as CWI Zhang Zhi Neng (QC3). The welding variables recorded by QC3 appeared to comply with WPS-B-T-4333-TC-P4-F.

FCAW welding of weld joints ESTL4-2B/L-101, 105 located inside PCMK east tower, lift 4, skin A, top of double diaphragm 119M to stiffener. Welder was identified as 047701. ZPMC QC was identified as CWI Zhan Bo (QC4). The welding variables recorded by QC4 appeared to comply with WPS-B-T-4333-TC-P4-F.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod, 134-8257-0045, who represents the Office of Structural Materials for your project.

Inspected By:	Goulet,George	Quality Assurance Inspector
Reviewed By:	Dawson,Paul	QA Reviewer
